

The University of Chicago

ECONOMIC SUCCESSION AND RACIAL
INVASION IN HAWAII

A PART OF A DISSERTATION SUBMITTED TO
THE FACULTY OF THE DIVISION OF THE
SOCIAL SCIENCES IN CANDIDACY FOR THE
DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF SOCIOLOGY

1931

By
ANDREW WILLIAM LIND

Private Edition, Distributed by
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CHAPTER I

HAWAII'S CHANGING POSITION

Introductory Note

Rarely is it possible within the social sciences to effect an isolation of the factors operating upon a specific problem with anything like the perfection achieved by the natural scientist within the laboratory; and when nature itself provides conditions in any sense approximating those of the laboratory, the task of the sociologist is to that extent simplified. For this reason, if for none other, Hawaii possesses a tremendous fascination to the sociologist. Few regions of the earth's surface lend themselves so readily to exhaustive social analysis as do the Hawaiian Islands.

Located as it is two thousand miles from the nearest mainland and an even greater distance from inhabitable insular neighbors, Hawaii has enjoyed a phenomenal isolation from extraneous influences throughout its history; and even within the past century and a half of extensive contacts with the lands across the surrounding seas, the communication has been within measurable limits. Likewise the fact of its restricted size¹ and the limited range of its economic resources greatly enhances the value of the Islands as a sociological research laboratory.

Among the numerous problems which intrigue the social researcher in this island world are certain ones of an ecological character,² which command particular and special attention because they constitute the foundation upon which much of the cultural

¹The land area of the entire archipelago is 6,740 square miles or less than that of the state of New Jersey.

²Ecology may be defined for our purposes as the study of the processes affecting the distribution and movement of individuals and groups in space. McKenzie gives the subject a similar connotation in his definition of ecology as "The study of the spatial aspects of the symbiotic relations between individuals and groups." (Unpublished manuscript.) Park defines it as the "science which seeks to isolate . . . the forces . . . which tend to bring about an orderly and typical grouping of population and institutions" (R. E. Park and E. W. Burgess, The City [Chicago: The University of Chicago Press, 1925], pp. 1-2).

superstructure is raised; and until they are disposed of in some fundamental fashion, any attempt to understand social relations within the Islands must be subject to severe limitations. In Hawaii at least, it must be patent to all who look that the processes¹ involved in the exploitation of the soil and the securing of a livelihood color and condition man's entire relationship to his fellows.

Like the plants which have established themselves in the Hawaiian soil, all the peoples which have drifted to these shores at one time or another during its history have dropped roots of varying strength into island soil, affecting in some slight degree the relations which exist between all those who have preceded them and preparing the soil for others to follow. The position which each individual occupies relative to his fellows in the struggle for a livelihood in the island setting, as well as the shifting in position of each in response to the changing ecological stresses and strains, is, theoretically at least, susceptible of quantitative statement; and in similar fashion one may subject to an increasing degree of numerical analysis the changing position of the entire region with reference to the larger world beyond the seas.

Such a study, interesting and instructive though it might be for illustrating certain ecological techniques and for securing an understanding of the Island experience, would be of rather limited scientific value unless it were so formulated as to be readily compared with similar regional studies elsewhere.² It is

¹The ecological processes to be described in the following pages are not to be identified with those set forth in the text-books of economics, although there is considerable similarity at certain points; nor is the analysis intended to serve as an economic history of the Islands, despite the extensive use of historical materials. Throughout the study attention has been directed towards those factors in the Hawaiian situation which have affected the succession, not only of economic systems, but of populations and cultures. (Cf. latter portions of this chapter.)

²To the writer's knowledge, nothing of a strictly comparable nature has thus far been attempted in any other region, although some materials are available to permit of ecological analysis. J. B. Condliffe's New Zealand in the Making (London: G. Allen & Unwin, Ltd., 1930) represents one of the most complete economic histories of an insular region which has thus far appeared. Among the less exhaustive and more strictly ecological studies of regions may be mentioned McKenzie, "Ecological Succession

assumed, however, that an analysis of the sort here projected would have certain implications of universal significance.

Location and Position

The thousands of miles of open water which separate Hawaii from inhabited land on all sides are likely to create a deep and abiding impression upon any who have crossed them; and it would be easy to over-emphasize the geographic isolation which the Islands enjoy. While it is true that the encompassing ocean constitutes a very real and, at times, insurmountable obstacle to contacts with the outside world, yet the sea has likewise provided a medium which has greatly magnified man's own powers of locomotion.¹ One of the most striking facts of Hawaiian history has been the changing function and significance of these geographic distances.²

One should not fail, however, to recognize the very real significance of the unalterable water spaces which surround Hawaii on all sides. The insular character of Hawaii and the wide expanse of the ocean in which it is set serve to stamp the entire economic and social life of the community in a way which can never be overlooked. The mere fact of the insularity tells a story of surpassing interest to the ecologist--a story of cultural as well as economic and biological significance. It locates the community and by the same token suggests a preliminary framework upon which most of the subsequent descriptive structure may be erected.³

in the Puget Sound Region," and N. S. Hayner, "Ecological Succession in the San Juan Islands," Publications of the American Sociological Society, Vol. XXIII, 1929.

¹Ellen Semple, Influences of Geographic Environment (New York, 1911), p. 293: "Man, by appropriating the mobile forces in the air and water to increase his own powers of locomotion, has become a cosmopolitan being. Always the eternal unrest of the moving waters has knocked at the door of human inertia to arouse the sleeper within; always the flow of stream and the ebb of tide have sooner or later stirred the curiosity of the land-born barbarian about the unseen destination of those marching waters."

²The two thousand miles between San Francisco and Honolulu meant something quite different to the early Pacific navigators, who required a month of sailing to cover the distance, than it did to Maitland and Hegenberger who flew the distance in twenty-six hours.

³The following study is defined and conceived primarily

The poet's definition of Hawaii as being rather indefinitely anchored on an ocean--"a paradise lost on the summer seas"--was perhaps accurate enough to locate this territory up to about a century ago and it is probably still as precise a location as most of the people in America could give. The local post office is constantly receiving letters addressed to "Honolulu, Japan," or "Hawaii, Philippine Islands," and there are fairly recent cases on record where the Islands have been placed as distant as New Zealand and Australia. For large numbers of people in the western world, Hawaii is still lost in a vast ocean and for even larger groups, the word, "Hawaii," evokes only vague images of dusky maidens in hula skirts, grass huts, fiery volcanoes, and opalescent seas.

It was, however, in the period previous to the arrival of Captain Cook that the mere physical distances exercised their most important rôle. During this period Hawaii was to all intents and purposes a lost world, with a geographic location, it is true, but without a position.

Ethnologists are still groping for clues as to the origins of the culture extant in Hawaii previous to the advent of the white man, but at least there is fairly general agreement among students that four centuries or more had elapsed between the last important native invasion of the territory and the visit of Captain Cook. Although a few sporadic contacts with Hawaii had been made by ship-wrecked fishermen, traders and voyagers accidentally thrown on these shores by the ocean currents of the Pacific, few of these men ever returned to relate their adventures; and as far as the Western world was concerned, these Islands did not exist until the close of Cook's Voyages in 1785.¹ The effectiveness of this oceanic isolation is the more apparent when

within an ecological frame of reference, i.e., in terms of the spatial relations which exist between individuals and groups. The Hawaiian Islands and their populations are conceived as occupying space, or an order and position with reference to other areas and groups. For this purpose a number of concepts indicating points of view, a number of disjunctive concepts valuable for analysis, and certain theories wherein trends are predicted and the relation of concrete materials to the general thesis are suggested, will be introduced at the appropriate points within the discussion.

¹Mr. Stokes, formerly of Bishop Museum, has fairly conclusive evidence of fishing sampans from Japan having been stranded on these shores within historic times.

one recalls that Spanish and Portuguese explorers had been active in the Pacific for at least two centuries before. That the Islands should have been discovered at all in view of their location at approximately the maximum distance from the continents surrounding the Pacific Ocean, is to be attributed perhaps to wide range of the movements of the early navigators and the central position of the Islands, fairly near to the paths of trans-Pacific trade. Their pin-point size when compared with the vast reaches of the ocean was scarcely conducive to their early discovery.

Certainly the general pattern of native Hawaiian culture can be comprehended only in the light of a protection from outside stimuli which the broad Pacific could provide. Even to this day of rapid air travel, the 2,000 miles of ocean expanse to the nearest mainland body effectively checks both communication and transportation to the Islands in a most telling way.

It is to the changing status of the Islands with reference to the rest of the world due to their position in the mid Pacific that we are primarily concerned in the remainder of the chapter and, indeed, in the entire dissertation we may conceive of our problem as essentially that of the changing positions which these Islands have assumed to each other and to the world at large. On this problem, in the last analysis, hang all the supplementary questions of race relations, economic competition, and cultural diffusion. Mark Twain's characterization of Hawaii as "The loveliest fleet of islands anchored on any ocean" expresses a profound truth in its implication of impermanence of location.

Ships and Hawaii's Position

As far as the western world is concerned, the Hawaiian Islands, with their 6,740 square miles of territory divided among eight major volcanic islands, began to rise out of the Pacific Ocean in the latter decades of the eighteenth century. Navigators and geographers have established their location on the map in mid-Pacific, near the northern edge of the tropics, and extending from the eighteenth to the twenty-second degrees of North latitude and from the 154th to 160th degrees of West longitude.¹

¹In point of geographical location, the following distances separate them from important insular and mainland centers around the Pacific basin:

While this location, measured in terms of miles or degrees of latitude and longitude, is the same to-day as in the eighteenth century when Hawaii existed only for a few Polynesians scattered over the Islands of the South Pacific, for practical and sociological purposes the water barriers have greatly diminished in this period. Geographical distances concern us only in so far as they measure economic and finally social distances between individuals and groups.

The western sailing vessel was, of course, a vast improvement over the Hawaiian outrigger canoe as a medium of rapid and safe travel, and its introduction marks the initial shift in Hawaii's position. Judged by modern standards of communication, it still left the Islands largely isolated. James Hunnewell, founder of the house of C. Brewer and Company, Ltd., required a period of nine months and one day to make the sea voyage from the Atlantic coast to Honolulu in 1826,¹ and the five months of sea travel by the "Thaddeus" carrying the first contingent of missionaries to the Islands in 1820 was not regarded as excessive. Sailing vessels,² plying between Hawaii and China in the fur trade could complete the voyage in from five and a half to seven and a half weeks, although a longer period of time was sometimes required.³ Of 85 voyages between San Francisco and Hawaii during 1850 and 1851, the median time required was seventeen days, the most rapid time being twelve days.

These distances have been greatly reduced particularly through the introduction of mechanical devices of transportation,

San Francisco	2,100 miles
Vancouver, B.C.	2,305 miles
Fiji	2,736 miles
Samoa	2,263 miles
Tahiti	2,380 miles
Auckland, N.Z.	3,850 miles
Panama	4,620 miles
Yokohama	3,440 miles
Hongkong	4,893 miles
Sydney, Australia	4,484 miles
Manila	4,778 miles

¹Josephine Sullivan, A History of C. Brewer and Company (Honolulu, 1926), p. 18.

²The universal medium of contact between Hawaii and the Western world until 1870.

³Based on article by W. D. Alexander, "Early Visitors to the Hawaiian Islands," Thrum's Hawaiian Annual, 1890 (Honolulu, 1884-1930), pp. 37-43.

the latest of which are the zeppelin and airplane. The record time distance on the San Francisco-Honolulu route is that established by Lieutenants Maitland and Hegenberger when 25 hours and 50 minutes were consumed, less than the number of days required by some of the sailing vessels a century ago. The trip is now commonly completed within a four day schedule on the larger passenger express vessels which ply between San Francisco and Hawaii. The Pacific Northwest, which was from three to four weeks distant from Honolulu by the infrequent trading and whaling ships joining the two areas, has now reached a proximity of six or seven days by regular steamer connections. The Orient has been brought nearer to Hawaii by two or three weeks sailing time as a result of the shift from sailing to steam navigation.

The following table of time distances of Pacific travel at various periods serves to indicate the degree to which Hawaii's position with reference to the rest of the world has changed in the past century due to the introduction of new devices of transportation.

TABLE I
SHOWING TIME DISTANCES BETWEEN HONOLULU AND WORLD PORTS BY
VARIOUS MODES OF CONTACT

Distance in Days to:	Distance in Miles	1780-1850 Sailing (Days)		1850-1930 Steam (Days)		1925 Air	
		Average	Record	Average	Record	Average	Record
San Francisco	2,100	20	8	6	4	26 hrs.	25 hrs.
Puget Sound	2,400	25	13	7	5½	...	...
Yokohama	3,440	..	..	10	7	...	...
Hongkong	4,900	60	17	13	...	...	...
Sydney	4,484	84	...	14	13½	...	7 days
New Zealand	3,810	44	...	12	11½	...	...
Manila	4,778	75	16	14	...	...	...
New York	5,100	146	81	11	7	...	...
London	...	159	109	...	13	...	...
Bremen	...	172	113	...	14	...	...

Trade and Hawaii's Position

Mechanical improvements in transportation are, however, the function and index of profound economic changes even more significant. The effective shifting of Hawaii's position in the Pacific is to be attributed primarily to its absorption within

the streams of world trade and commerce. Our data thus far have been concerned primarily with the limits set by Hawaii's geographical position and man's inventive genius to the contacts between these Islands and the rest of the world. The intensity of contacts, however, is even more dependent upon the establishment of bonds of economic inter-relationship such as those which now knit the world "into a single complex of vital interdependence."¹

The factors which held these Islands captive in a water-bound isolation lasting for centuries are in many essentials the same as those which so long effectively prevented the white man from invading India, Java, the Philippines and Africa. The lack of contacts was due not so much to physical and psychological barriers to communication as it was to the absence of effective incentives to contacts. Hawaii had not acquired a position for itself in the widening web of trade relationships. And in an evolving world economy, this position must inevitably fluctuate according to conditions primarily economic to be described hereafter which are quite as much determined outside the territory as within.

A supply station.--Following Captain Cook's discovery of the Islands a century and a half ago, Hawaii figured in the calculations of westerners either as an Elysium for the adventurer, spiritual or material, or a temporary haven of refuge for the trans-Pacific shipper. Indeed for the first eighty years of its existence to the western world, Hawaii occupied the rôle of an oasis on the broad Pacific desert across which lines of trade relations were being slowly and cautiously thrown. It was a place of refreshment and shelter for the trader, the explorer, and the missionary. Sailing ships of any and all descriptions crossing the 5,000 miles of ocean waste between Asia and America found it expedient to deviate from the more direct ocean channels connecting the two continents in order to replenish their supplies of fresh water, meat, and vegetables, as well as to repair damage and seek storm shelter in Hawaii.

It is significant that during the first fifteen years of contact between Hawaii and the countries bordering the Pacific commercial exploitation of the Islands, except as a way station,

¹R. D. McKenzie, The Evolving World Economy, Vol. V, Reports of the Albert Kahn Foundation for the Foreign Travel of American Teachers (New York, 1928), p. 11.

was almost entirely lacking. Following Captain Cook's tragic experience with the Hawaiians, more than seven years elapsed before additional contacts of any sort were established with the Islands,¹ and those which followed in the period from 1784 to 1792 were made by the Northwest coast fur traders and explorers seeking supplies of fresh water and vegetables.² Some twenty-five different ships--traders, war vessels, exploring ships from the United States, England, France, Austria, and Spain--"put in" at the ports of Hawaii in six years (1786-92) to resupply with fowl, pork, fruit, yams, vegetables, firewood and water.³ Not until after 1792 is there any evidence of export trade from the Islands for purposes other than refreshment of ships, and such articles as were brought into the Islands previous to that date served only as remuneration for the supplies secured.

The geographic bases of trade.--Clearly, however, ships' supplies as extensive as those necessary for the limited fleet which stopped at the Islands during the first twenty years after discovery, could not be secured from a mere pin point of the ocean's surface. The 6,500 square miles of earth's surface encompassed by the Islands (corresponding in size to the combined areas of Connecticut and Rhode Island) must necessarily possess certain specialized economic resources. The eight inhabited islands of the group--Kauai, Niihau, Oahu, Molokai, Lanai, Kahoolawe, Maui, and Hawaii, all represent the eroded summits of volcanoes, only one of which on Hawaii is now at all active. Ranging from tropical and sub-tropical conditions near sea level to temperate conditions in the inland, mountainous sections which are found on most of the Islands, a fairly wide variety of crops is theoretically possible. Soil and climatic conditions vary greatly throughout the group, reducing the cultivable area at present to about 16 per cent of the whole. Perhaps one fourth of

¹Alexander, op. cit., p. 37.

²Captain Portlock and Captain Dixon, both of whom had served under Captain Cook, were probably the first white visitors to the Islands (1786) subsequent to the departure of the "Resolution" and "Discovery" in 1779; and the principal purpose of their visit was to secure hogs, vegetables, firewood, fishing lines, and water.

³Voyages to Hawaii Before 1860; based on Narratives in Hawaiian Missionary Children's Society (Honolulu, 1929).

the entire area of the Islands is forested with species of greater or less economic values, and the firewood secured from these regions was one of the inducements to early voyagers to visit these Islands. Of mineral resources, there are almost none, although salt figured as one of the important supplies which early traders secured in Hawaii. It is, however, the agricultural resources of the Hawaiian Islands which have from the earliest times proved the most important basis for their contacts with the outside world. The crops of primitive Hawaiian agriculture--taro, sweet potatoes, plantains, yams, sugar cane, cocoanuts, and melons; and fowls, hogs, dogs, geese and pigeons, were eagerly sought by the early voyagers across the Pacific, just as in more recent times, sugar cane, rice, coffee and pineapples provide the bases for the strong economic bonds which have incorporated Hawaii into the world currents of trade.

A tramp trading station.--Even the discovery that Hawaii possessed certain economic resources for which there was a demand did not at first suffice to greatly alter the position of the Islands. The export of salt and sandal-wood began as early as 1792, initiating a series of very profound social changes within the country, but even in the heyday of the sandal-wood trade from 1810 to 1825, the number of contacts with the outside world did not increase as much as one might expect. For a time it appeared that the native sandal-wood was to prove a veritable bonanza to the Islands, enriching its inhabitants and vastly increasing their economic and social relationships with the world. Selling on board ship at the stupendous sum of \$145 to \$150 a ton, and with large forests available in the mountainous regions of the Islands, it is not strange that for a time the local chiefs should be swept off their feet in a craze of sandal-wood exploitation.¹ The reign of Liholiho from 1811 to 1824 has been characterized by Kuykendall² as "the Sandal-wood Days," a period when wealth in the form of American and Chinese merchandise poured into the Islands, and large quantities of the wood were shipped from Hawaii to China where its fragrant qualities were so highly

¹R. S. Kuykendall, "Some Early Commercial Adventurers of Hawaii," Report of Hawaiian Historical Society (1928), p. 15.

²R. S. Kuykendall, A History of Hawaii (New York, 1926).

valued.¹

Perhaps as remarkable as the sudden development of this economic bond between the Sandal-wood Isles and the world is the rapidity of the decline and the limited range which it covered. Although small exports of wood continued until as late as 1840, the peak of this phenomenal trade had been passed by 1825, or fifteen years after the main movement began. Even more significant, however, to the consideration of its effect upon Hawaii's position in the world is the fact that the trade was almost exclusively confined to Yankee merchant men plying between the United States and China. Except for the limited crews necessary to man the ships transporting this valuable commodity to China, few foreigners were introduced to the Islands through this trade, for the entire labor of cutting and transporting the wood from the forests in the mountainous regions to the ships was carried on by Hawaiians under directions of the chiefs. Mathison relates in 1822, "The Americans are the only carriers, and Canton is the only market for it [sandal-wood]."²

Hawaii's position relative to the Western world was far more profoundly altered by the subsequent period of whaling and trading development which continued from 1819 to about 1870, although even during this period Hawaii functioned primarily as a supply station rather than as an active participant in the trading operation. The discovery of important sperm whale fisheries off the coast of Japan in 1820 greatly stimulated the whaling industry in the Pacific, particularly by American whalers.

Hawaii, located so conveniently about midway between the California Coast and Japan, served admirably as a stopping point on the way to the banks and as a center for refurnishing and trans-shipping the oil and bone. It is related that in 1810 there were only 60 white people on the entire Island of Oahu;³ in 1827 the United States Secretary of the Navy announced that during the year no less than 2,000 American seamen were in the

¹Probably several millions of dollars worth of wood left the islands, although the commodities received in exchange probably did not begin to approximate this value, for reasons already observed.

²Thrum's Annual, 1905, p. 57.

³James J. Jarves, History of the Hawaiian Islands (Hartford, 1847).

single port of Honolulu. In this year 82 whalers visited the port as against 23 trading ships of all varieties. The range and intensity of contacts during the early whaling days is indicated by the following table of the yearly arrivals of whaling and merchant vessels at the port of Honolulu from a register kept by Mr. S. Reynolds, Merchant of Honolulu.

Whalers

	<u>1824</u>	<u>1830</u>	<u>1835</u>	<u>1843</u>
American	48	75	63	109
British	15	19	13	7
French	..	..	..	14
St. Johns, N. B.	..	..	1	4

Trading Vessels

Of or from	<u>1824</u>	<u>1830</u>	<u>1835</u>	<u>1843</u>
America	3	2	3	2
Great Britain	1	2	..	1
China	..	4	2	2
Chile	1	3	2	1
California	7	2	1	3
France	1	1	..	1
Isle of France	1	1	2	1
Fannings Island	2	..	..	1
Kamschatka	..	..	..	1
Mexico	2	2	2	7
Manila	..	2	..	..
North West Coast				
America	2	6	5	5
Other Ports Oahu	..	11	11	6
Panama	..	..	1	..
Peru	2	2	2	..
Sitka	..	..	..	1
Tahiti	..	<u>1</u>	..	<u>1</u>
Totals	17	38	31	32

It is obvious that the trading contacts covered a rather extensive region of the world even as early as 1824, while the contacts with the whalers, exclusively confined to the British and Americans, were much more intensive in nature.

The rôle of the whaling industry as a contact agency between Hawaii and the western world became most apparent in the fifties when the number of whalers visiting the Islands reached their maximum of 549 during a single season and the value of foreign merchandise (principally whale oil and bone) re-exported from Hawaii exceeded that of the entire domestic exports.¹ It

¹Minister of Finance, Broadside, 1872.

was estimated that the value of all whalers, with cargo, that visited at the various ports during the year 1844 was over \$12,000,000, by far the greater part of which was American.¹ During the year 1855 sperm and whale oil to the extent of 1,546,000 gallons and 827,954 pounds of whale bone were trans-shipped from Hawaii, principally to the mainland of the United States, but also in small quantities to Sydney, Australia, and to Havre, France. Quite naturally trading contacts with the Islands were stimulated by this phenomenal development of whaling. During the early fifties,² the number of merchant vessels touching at Hawaiian ports increased to over 200 per year, a number which was never again equaled until 1878, although an average of about 150 merchant ships stopped annually at Hawaii in the period from 1843 to 1872, making a decided increase of contacts of this sort with the outside world.³

The two ports of Honolulu and Lahaina, Maui, had become during the whaling period not merely centers for refurnishing the whalers with Hawaiian produce, including water, food, wood, and even men to man the ships, but had come to occupy important stations in handling the specialized whaling supplies, as well as entrepots for the oil and bone itself. This type of secondary industry naturally stimulated interest in the Islands as a field for economic development for its own sake, thus initiating the last important shift in Hawaii's position in the world of trade and commerce.

Hawaii in the world channels of trade.--During the last era from 1876 on Hawaii was to be integrated within the expanding complex of world trade, within which physical distance, measured in terms of miles, would be superseded by distance, measured in time and cost units. Not only was a further important reduction of Hawaii's physical isolation to be effected through the spanning of the Pacific by fast traveling steamships and airplanes, but even more indissoluble ties of financial investments and credit were to be imposed.

¹Thomas G. Thrum, "Hawaiian Commercial Development," Thrum's Annual, 1896, p. 90.

²The trade with California, due to the gold discoveries, was undoubtedly responsible for a considerable part of the increased shipping.

³Minister of Finance, Broadside, 1872.

Exports of domestic products to others than traders and whalers had developed, of course, with the very early salt and sandal-wood trade, but these contacts were almost inconsequential when compared with the developments of this later period. In 1837, the value of the total exports of domestic produce was probably not over \$44,000, for the entire country, and the traders regarded themselves as primarily catering to the needs of visiting merchant and whaling ships.¹ Even by 1850, only a slight amount of money was in active circulation throughout the kingdom and the paltry export trade of domestic merchandise, amounting to about \$190,000, was almost entirely in the hands of foreigners.²

The discovery of gold in California effected a temporary increase of exports of vegetables, wheat, fruit, and meat, but this stimulus soon passed, leaving the country again primarily dependent upon the whalers for its economic activity. A beginning had however been made during these decades in the establishment of the sugar industry, which was to experience such a phenomenal rise during the period after 1876.

The advantage of geographic proximity to Hawaii which the United States enjoys over its competitors became apparent in the early sandal-wood and whaling trade; and the years since 1876 have witnessed only a further development of the dominance of the United States, and particularly California, in the foreign contacts of Hawaii. By 1850 over 62 per cent of our import trade was with the United States, chiefly California,³ and the Reciprocity Treaty of 1876 served to further guarantee the dominant control which they already possessed. Hawaii's exports, which increased so markedly in the ten years following Reciprocity--from \$2,241,000 in 1876 to \$10,565,000 in 1886, or 472 per cent--was even more exclusively confined to the California markets.⁴ In 1884, for example, the United States, through its California ports, received 71,000 tons, or over 99 per cent of all Hawaii's

¹ John Diell, Sandwich Island Gazette (Honolulu), May 26, 1838.

² Report of Minister of Foreign Relations of the Kingdom of Hawaii, April, 1850 (Honolulu).

³ Thrum's Annual, 1896, p. 98.

⁴ Ibid., 1890, p. 24.

foreign exports of sugar.¹ The total exports of sugar have increased from 13,000 tons in 1876 to 925,000 tons in 1929, of which almost the entire amount is shipped to San Francisco. The currents of stimulation measured by the value of import and export trade, between Hawaii and California, have been greatly intensified since Sugar became King in Hawaii.

The extensive commercial contacts with the outside world through such commodities as sugar, pineapples, rice, coffee, and tourists have stimulated commercial and trade relationships particularly with the United States, but in a degree with almost every section of the world. They have transformed these Islands from a primitive Polynesian commonwealth, into a highly specialized agricultural and industrial unit within the world complex of trade.

We may perhaps most effectively summarize the description of the material changing position of Hawaii by presenting in tabular form, on the one hand the distances--physical and temporal--which have separated Hawaii from the rest of the world, and on the other hand, the developing bonds of communication and transportation which counteract these distances.²

Diversification and uncertainty in trading contacts have been followed by specialization and regularity. The casual and tenuous ties established by tramp traders between the Sandal-wood Isles and Cathay, Siberia, the Pacific Northwest, California, Mexico, South America, and the Islands of the South Pacific are replaced by the strong, yet pliant cables of the sugar and pineapple trade. Two hundred million dollars in import and export values between Hawaii and the United States now bind the Territory to the American mainland with a tenacity which the sinking of the Islands into the sea alone could destroy. The geographic proximity to the mainland has been vastly accentuated by a commerce which now dominates island life.

Hawaii's position with reference to other regions about the Pacific basin has, on the other hand, been rendered more remote than formerly. The early contacts with Siberia, Alaska, and

¹Report of the Minister of Finance of the Kingdom of Hawaii, 1884 (Honolulu).

²As we have pointed out before, the spatial distances and trade contacts bear a functional relationship to each other which prevents their independent treatment.

TABLE II

SHOWING INTENSITY OF CONTACTS BETWEEN HAWAII AND OTHER REGIONS
OF THE WORLD AT VARIOUS PERIODS

Honolulu to:	Distance to Principal Port	1820-1840			1878
		Average Distance in Days	(1) Contacts in Ships	(2) Imports	Import Values
California.....	2,100	20	9	5,650	\$1,700,000 ³
Puget Sound.....	2,400	25	5	11,988	
East Coast U.S..	.....	146	7	121,061	300,000
Alaska.....	2,395	26	1	.....	.....
British Columbia	2,400	25	5	.....	30,000
Japan.....	3,440	47	2	.....	.....
China.....	4,960	60	4	36,810	83,000
Philippine Islands.....	4,778	75	6	.....	.....
Pacific Islands.	.....	..	.....	.....	6,400
New Zealand.....	3,850	87	.....	.....	52,700 ⁴
Australia.....	4,420	84	.....	38,232	
West Coast South America.	5,915	49	10	62,603	1,400
Panama.....	4,660	55	4	.....	.....
England.....	.....	159	3	34,005	550,000
Germany.....	.....	..	0	2,858	120,000

Honolulu to:	1900		1926		Aver. Dist. in Days
	Import Values	Export Values	Import Values	Export Values	
California.		(3)			6
Puget Sound	\$15,020,830	\$19,340,816	\$77,762,940	\$114,154,622	7
East Coast U.S.	(3)	3,176,943	(5)	(5)	10
Alaska.....	.....	.....	.....	.....	8
British Columbia.	113,480	17,067	30,132	511,939	7
Japan.....	673,410	(	3,279,547	186,246	10
China.....	384,522	54,052	804,210	151,829	12
Philippine Islands..	114,842		527,695	690,225	14
Pacific Islands..	1,035		183,543	7,259	..
New Zealand	(		642,824	35,946	12
Australia..	257,388	39,863	321,885	21,811	14
West Coast So.Amer..	222,750		1,989,200	.....	
Panama.....	.....		800	.....	
England....	1,774,655		145,272	559,276	
Germany....	384,103		672,392	95,392	

¹Covers 20 years of trading
contacts only.

²Imports only 1843.

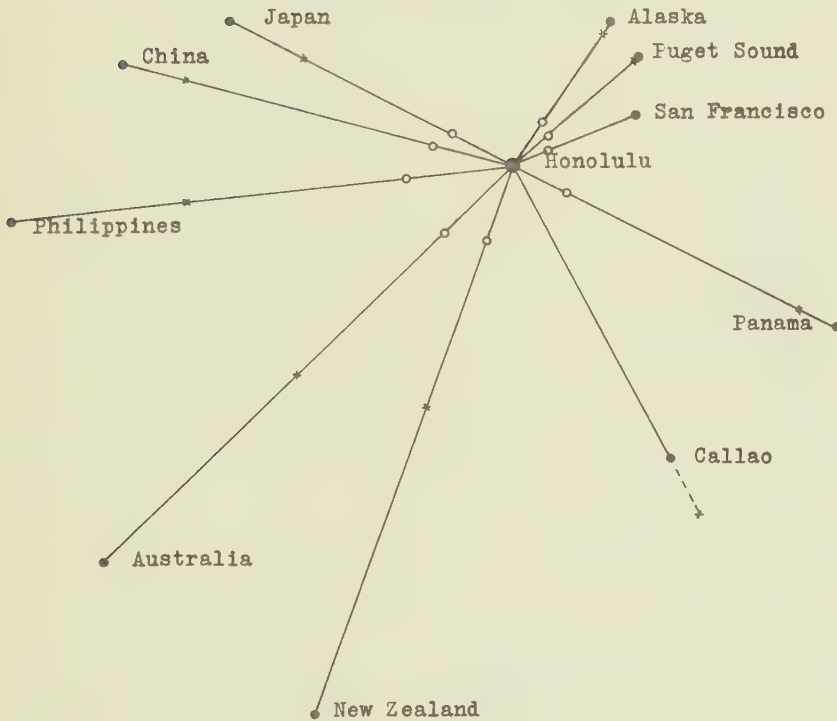
³Includes entire United
States.

⁴Includes New Zealand and
Australia.

⁵West coast United States.

Time Distances from Honolulu To Regions
Around the Pacific Basin--1830 & 1930

- Relative position with reference to Honolulu--Sailing time
- Relative distance from Honolulu Steamship time.
- * Geographic distance from Honolulu in terms of miles.



Mexico have almost totally disappeared; while trade relationships with British Columbia, South America, Japan, China, the Philippines, New Zealand, Australia, and Europe have assumed a very specialized nature within the island economy. Hawaii is bound to one as a market for its crops, to another for its production commodities, and to others for consumption goods, but

rarely to any one region for all these services. This dominating function is alone served by the United States. British Columbia now provides a market for a small portion of island pineapples; a similar function is served by England. South America provides Hawaii with its fertilizers, New Zealand and Australia with a portion of its food; while Germany, China, and Japan now figure largely as sources for the consumption goods which their emigrants in Hawaii utilize. Thus, with the partial exception of the United States, considerations other than that of geographic distance determine the position of the Islands with reference to the rest of the world. At no time since its discovery has Mark Twain's figure as to Hawaii's changing position been inappropriate.

Changing Position as an Index of Economic Succession and Racial Invasion

Social science, in its attempt to reduce the vast welter of social experience to simple formulas and abstract principles, is constantly seeking for indices to represent phenomena too complicated to be dealt with directly in quantitative terms. Attitude and opinion scales, mental tests, population pyramids, indices of mobility, and index numbers of all types are being devised in an attempt to secure a short-cut description of the involved social facts. It is perhaps the peculiar merit of human ecology that it reduces the human community to its simplest and most abstract terms and that the facts which it discovers function as quantitative indices of the more subtle and obscure processes of social life.

The changing position¹ of Hawaii has been conceived as the most abstract index of the entire island epic. Each successive shift in Hawaii's relationship to the world community, briefly sketched in the foregoing passages, has produced and reflected profound economic and cultural reverberations throughout the Islands. Perhaps the real justification for this study from a strictly sociological point of view is that one may ultimately

¹R. E. Park, "The Concept of Position," American Journal of Sociology, No. 1, XXXII, 10: "Since so much that students of society are ordinarily interested in seems to be intimately related to position, distribution, and movement in space, it is not impossible that all we ordinarily conceive as social may eventually be construed and described in terms of space and the changes of position of the individuals."

correlate such a large proportion of the personal experiences of the Hawaiian population, including attitudes and opinions, with these changes in the island position. The present study presumes merely to investigate some of the economic and cultural transformations in Hawaii which accompany and are in part initiated by the shifts in position.

During the 150 years since the discovery of Hawaii by Captain Cook, three major economies, corresponding closely to the three eras of Hawaiian-world contacts, have successively occupied the dominant rôle as the agencies for the exploitation of the region's resources and the securing of a livelihood for its population. The orderly sequence of economies--the one not only preceding in time but preparing the way for its successor--may conveniently be denoted by the term economic succession.¹ The description of this process obviously involves some discussion of the factors operating to effect the passing of one economy and the appearance of the next.

The three economies which have thus far occupied the Hawaiian stage--the native economy, the pioneer or intermediary economy, and the present plantation economy--may be presumed to mark the universal pattern of development in regions similarly situated, i.e., insular regions located in the tropics, already occupied by a primitive culture, but possessing open resources.² An examination of the history of the West Indies, Java, Sumatra, Ceylon, the Philippines, and the Islands of the South Seas would probably reveal a highly similar pattern of economic development.

The obvious lack of research material must forever leave untold the process by which the original economic invasion of the

¹Succession--A term borrowed from the plant ecologists, but given a somewhat specialized meaning in Human Ecology. It is the most abstract term used to designate the process by which one type of social organization follows another in orderly sequence. Succession is to be distinguished from the mere historical sequence of events, in that it takes account of the factors which condition the transition from one stage to another; and, unlike the terms, natural history or evolution, it abstracts the causal relationships which exist between the same type of factors in the sequence. According to the definitions of this study, therefore, succession is in the final analysis concerned with, and is reflected in the changes of position of individuals and groups.

²H. J. Nieboer, Slavery as an Industrial System (Hague, 1900).

Hawaiian archipelago occurred; and we must begin our study with an analysis of the established native economy and the forces by which it was maintained even some years after western civilization had made its initial impact. We discover an organization of the productive processes effectively designed to exploit the indigenous resources according to the rather simple and fixed demands of the native population. The occupation of the soil, its cultivation, division and tenure, and the orientation of the ceremonial and religious life of the people were of a sort to effectively sustain the underlying fish and poi¹ economy. Even the feudal character of the social organization, with its hierarchy of office and privilege, was closely integrated with the existing economy. Such a regime was obviously self-sufficing, and trading contacts within the Islands were almost lacking, while those with the outside world were nil.

Almost coincidentally with the initial shift in Hawaii's position due to its discovery by the English explorers, the native economy began to decline, and its rival and successor, the western pioneer economy, sank its first roots into island soil. The impersonal struggle between the rival economies was protracted and bitter, and the dominance of the invading system was hardly established before it was, in turn, threatened by the emerging plantation economy. The period of transition between the native and pioneer economies witnessed the gradual abandonment of the system of native agriculture and the diversion of Hawaiian energies to the satisfying of the demands of the invading traders for sandal-wood, specialized food supplies, timber, and for native labor. Agricultural lands in certain regions were abandoned; local economic self-sufficiency was greatly diminished; foreign commodities displaced local manufactures for native consumption; population began to concentrate in the emerging seaport towns; and a widespread social disorganization² ensued. Many of these changes are susceptible of quantitative statement.

The pioneer economy may be conceived as fulfilling an intermediary function between the native and climax plantation

¹Poi--A common article of food among the Hawaiians. Prepared from the taro root pounded to a paste and allowed to ferment. Webster's International Dictionary (2nd ed.).

²Defined by W. I. Thomas as "decrease of the influence of the existing social rules of behavior upon individual members of the group" (W. I. Thomas and F. Znaniecki, The Polish Peasant in Europe and America [Chicago: University of Chicago Press, 1918-20], p. 1128).

economies, a fact which is reflected in the brevity of its span of dominance. This era was initiated by a lengthy period of experimentation and transitory contacts. For approximately a half century after Captain Cook's discovery, the western pioneer economy maintained its foothold upon Hawaiian soil by means of casual, highly speculative, and short-lived trading relationships with the natives. The settled foreign population during this early period was very meager and of uncertain origin and status; and the native population and the natural resources functioned largely as raw materials to be exploited by the foreigners as rapidly and extensively as possible. During this period the invading economy began its inroads upon the indigenous culture and established for itself certain economic claims upon the Islands which have persisted and expanded to the present day. The latter half of this era witnessed the establishment of a considerable settled foreign population in Hawaii as resident cultivators and traders. During this period an approximation to the American homestead system enjoyed a rather precarious existence for a number of years, and the initial plantation experiments were made.

Indicative of the underlying shifts in Hawaii's position relative to the world at this time (1830-1860), and the emergence of the pioneer economy as dominant in the region is the rise of the town as the organizing center of the new regime.¹ Foreign capital began to seek investment in Hawaii; and trade, as a legitimate and permanent function of the community, was established through the seaport centers. Specialization of function, the division of labor, and the integration of Island life through the deepening channels of communication and transportation between the dominant centers and the periphery, provide additional indices of the evolving economy.

The climax period in the economic succession in Hawaii was finally established only after a lengthy struggle extending over a half century, in which the advance of the invading economy was contested not only by its predecessors in the series, but even more by the rival plantation systems in foreign lands. The field of contest was, in part, removed from Hawaii to the world ex-

¹Dominance--when applied to an economic system, it denotes a position for the most effective and extensive utilization of the resources of a region and for the maintenance of a stable equilibrium.

changes of sugar, coffee, and pineapples, and to the council chambers on tariffs, embargoes, and immigration. When "sugar became king" in Hawaii, the last important alteration in the position of the Islands in the world community occurred. Hawaii became oriented to the world markets and eventually epitomized in its most advanced form the science and technological achievement of the western world.

The bases for the final ascendancy of the plantation system must be sought in a variety of factors, most of which are operative in all agricultural regions within the tropic and sub-tropic zones. Keller, Nieboer, and others have analyzed the rise of the plantation system, and Hawaii appears to conform quite closely to the general pattern--an abundance of arable land in the tropics with a geographic and cultural setting which prevents the use of white labor, the specialized and extensive cultivation of one or two stable crops, the resort to force as a device to secure native labor, the importation of cheap labor likewise subjected to some type of compulsion to guarantee continuity of service.¹ Hawaii moreover illustrates the rôle of large bodies of capital, organized for large scale production and co-operative enterprise, in the dominance of the plantation regime. The gradual perfection and development of this system, in response to the pressure exerted by the world market, has resulted in an organization of the processes of agricultural production which is perhaps without peer in the western world; the resources of science and technical skill have been mobilized for the assistance of industry on a mammoth scale and at tremendous expense. The plantation system in Hawaii, with its organization of all the factors of production, including land, labor and capital, and the entire community itself, for the maximum of economic efficiency, probably marks the crowning achievement of western capitalism in this field. Yet the very efficiency of this economic structure now offers a threat to its existence.²

Correlative to and implicit in the economic succession briefly sketched, has been a series of ethnic labor invasions and occupational displacements in Hawaii, which have had profound

¹Cf. A. B. Keller, Colonization (Boston, 1908), Chapter I; and Nieboer, op. cit.

²Infra, Chapter VII.

social implications. These extensive population movements fortunately lend themselves to quantitative analysis and thus provide another basis for comparison with the changing ecological position of the Islands. The more dramatic and doubtless the most significant of these movements have been initiated and controlled by the plantation system and are thus confined in point of time to this latter period. The cultivation of the soil under Caucasian control in Hawaii, as elsewhere in the tropics, has been conducive to the establishment of a highly stratified society. Judged both by the wage received and the social status achieved, the rise of a distinct cleavage between the plantation laborer and the rest of society is clearly marked; and equally evident is the tendency for the laborer to escape from this category as rapidly as the opportunity presents itself.

The natural consequence has been the continuous cycle of (1) labor importation, (2) its exploitation for a few years, and (3) the plantation exodus. This fundamental pattern, with minor variations, seems to persist throughout the plantation system, in spite of governmental interference, strikes, excessive shipping costs, and foreign proscriptions. When one source of supply fails, another is soon discovered to provide this labor juggernaut with fresh material; when Chinese threatened the scheme through sheer numbers, Japanese were used to checkmate, and when these latter proved onerous in their demands, Portuguese, Koreans, Porto Ricans, Spanish, and Filipinos relieved the situation. With but slight and infrequent interruptions, the flow of population into the plantation hopper and later out into the Hawaiian non-plantation receptacles, to the United States, or back to the country of origin goes on unceasingly.

Each new supply has left its special imprint upon the Hawaiian social system, varying in its intensity and significance according to the size of the invading group, its age and sex composition, and the pattern of the culture. The ever changing hues of Hawaii's polyglot and polychrome population and the warp and woof of its perplexing inter-racial problems are largely to be traced in the flux and flow of its ethnic labor groups.

Another series of significant ecological movements, correlated with the underlying economic pattern and the changing rôle of Hawaii in the world trade streams, relates to the shifting positions of each of the immigrant groups along the economic and

social ladder in Hawaii. As the laborers effect a release from the plantation system, each ethnic group characteristically follows a given set of patterns in becoming accommodated occupationally to non-plantation life. The nature of the accommodation varies in part with the date and order of arrival in Hawaii of the particular group among the rest, the occupational experience and tradition of the group in the old country, the vested interests of the dominant group in the specific occupation, as well as the capacity of the occupations to absorb additional units.

Primary in its influence upon the rate of the vertical movement of the immigrants and their children is the pressure exerted through the population at the lower levels of society. The principal forces initiating this upward movement of population are the pressure of the natural increase of population, the negative influence of the plantation, the superior standard of living which the Hawaiian environment affords to the immigrant, as well as the freedom to compete for a more desirable position.

The issue of what has been termed economic succession and racial invasion¹ in Hawaii is a problem in financial and population equilibrium which now threatens the entire economic structure. The normal processes of production have led to the creation within recent years of a surplus of both capital and potential labor, which the system under its present organization cannot assimilate. The dominant industries have reached a stage where they cannot profitably absorb additional units of capital investment comparable in size to their profits seeking reinvestment. The foreign market for this surplus capital, of course, constitutes a potential competitor to the Hawaiian system. The surplus man-power built up by the constant influx of plantation laborers, augmented by the appearance of a large second generation, cannot find within the closed economic system of Hawaii a field for investment. Foreign fields for absorbing the Hawaiian surplus are even more difficult to find in the case of labor than of capital. The impasse, which Hawaii is now reaching in the disposition of its financial profits and labor by-products, is undoubtedly a forecast of the dilemma which other regions will face as the world rapidly becomes a closed economic system.

¹The term invasion is utilized to designate the preliminary incursive movements of a succession by which the position of the occupants of the region is jeopardized. In the case of most of the racial movements, it is impossible to trace the activity beyond the preliminary stages.

CHAPTER VII

THE HAWAIIAN PROBLEM IN ECOLOGICAL PERSPECTIVE

Hawaii in the World Web of Life

To the mind of the enraptured visitor or the sentimental resident of the Islands, it is inconceivable that this idyllic retreat from the stress and storm of ordinary life should ever be invaded by the specters of race prejudice, class conflict, or economic want. Hawaii is still "the loveliest fleet of islands anchored on any ocean," a mystical paradise in summer seas, yet unspoiled by the serpent's venom.¹ Yet if the foregoing discussion has meant anything whatsoever, it has demonstrated the irretrievable eclipse of the Island Arcadia pictured by the poets.

The past century and a half has witnessed the virtual transposition of these Islands from an unknown point in mid-ocean to the cross-roads of world lines of trade and communication. Its blissful state of isolation has been forever shattered by a thousand forms of contact which now bind it to a contaminating outer world. For good or for ill, it is inextricably enmeshed in the world web of life, and its problems become now to a limited degree those of the macrocosm by which it has been engulfed.

The relatively simple, self-sufficing, production economy of the ancient Hawaiian could provide for the fixed needs of the population which remained fairly permanent as to size. Under the feudal form of economic and social organization which prevailed, there was little incentive and slight occasion for increasing either production or population. Abortion and infanticide were utilized to restrict the population to a fairly stable figure.² With the coming of the white man and his competitive economy, however, the decline of the old order was rapid and sure. Not only did it mean the collapse of the main structure of Hawaiian economy, including the chiefly hierarchy, the communal self-

¹The popular periodicals and newspaper editorials, educational propaganda, and luncheon club speeches are saturated with this idyllic Hawaiiana.

²David Malo, Hawaiian Antiquities (Honolulu, 1903), p.103.

sufficiency, and the system of production exclusively for use, but it cleared the field for the more rapid introduction of specialization and efficiency. There are probably few regions of the world which have during such a brief period of time passed through such a complete metamorphosis of their systems of agricultural production and in which the capitalistic economy is more highly developed.

Preëminent among the changes which the Western competitive order has produced in Hawaii is the high degree of economic specialization. As the early chapters of this study indicated, the first half of the last century was a period of experimentation in widely diversified industries by a foreign population which was still fairly homogeneous culturally. The past eighty years, however, has witnessed the decline and disappearance of one after another of these sporadic growths and the highly specialized development of a limited number of fields in which Hawaii exercises a world-wide rôle. In the world web of trade relationships, Hawaii's claim to recognition rests upon sugar and pineapples, and the largest portion of its outside contacts revolve about these two commodities. Over ninety per cent of the export values of the Islands are now confined to these two items,¹ and there is no evidence that the dominance is likely to decline in the near future.

Concurrent with the internal specialization of function has been the establishment of dependent relationships to the world markets of these particular commodities. Hawaiian sugar is no longer disposed of to visiting traders and whalers, but enters directly into the world channels of sugar trade through the San Francisco and New York exchanges. Its price is therefore subject to all the fluctuations which occur in the world market, and Hawaii's prosperity or adversity is determined largely by the state of the sugar market as a whole. Islanders, from plantation manager to water-boy and from Governor to ditch-digger, rise with a smile to learn that "sugar is up" and bewail the news that "sugar has dropped two tenths of a cent."

This striking sensitivity to the world price level of sugar arises in part out of the fact that Hawaii's share of the

¹Annual Report of the Governor of Hawaii to the Secretary of the Interior, 1930, p. 40.

world's sugar production is so limited. For the past thirty years, in spite of the amazing increase of production in the Islands, its ratio of the total production throughout the world has remained consistently around three per cent.¹ When cane sugar alone is considered, Hawaii's ratio has remained at about five per cent. Thus Hawaiian sugar prices have been subject to developments in the West Indies, South America, India, the Philippines, Australia, Java, and Africa.

Ever since 1876, Hawaii has been protected in its competition in the world sugar market by tariff differentials with the United States, the chief purchaser of its products. The original Reciprocity treaty of 1876, which admitted to the United States free of duty, among other articles, "muscovado, brown and all other unrefined sugar," gave the Islands the benefit of an expanding market, with only the competition of the Louisiana sugar supply, which was quite inadequate to meet the demand. This 20 per cent differential over other foreign competitors, such as the Philippines and the West Indies, served to fix the dominance of the sugar industry in the Islands and to establish its firm position in the American market. A temporary, but serious menace to the security thus established took the form of the expanding American beet industry and the McKinley tariff bill of 1890 which, "while removing the duty on raw sugar imported into the United States, compensated domestic farmers and manufacturers by giving them a handsome bounty on the output of their fields and mills, producing on competitors in Hawaii an effect that was immediate and ruinous."² The revolution of 1893, culminating in the annexation of the Islands by the United States in 1898,³ restored the tariff protection to the sugar industry of Hawaii, and again restricted greatly the range of competition which it was forced to meet.

Under the preferential tariff agreement with Cuba, which became effective in 1902, Hawaii has found a formidable rival for

¹Cf. A Graphic Story of Sugar, University of Hawaii Agricultural Studies, No. 8 (Honolulu).

²Charles and Mary Beard, Rise of American Civilization (New York: Macmillan Co., 1930), p. 359.

³The Wilson-Gorman Tariff Bill of 1894 greatly relieved the situation for the Hawaiian planters by reestablishing the duty on sugar.

the world's greatest sugar market. The West Indian republic has enjoyed a considerable advantage in this market due to its greater accessibility and its lower operating costs in the form of labor wage and irrigation charges. Cuba's sugar production, which is between five and six times the size of that of Hawaii, quite naturally dominates the American market, and the size of the Cuban crop is an outstanding factor in the determination of the price paid for Hawaiian sugar.

Less portentous than Cuba but nevertheless sufficiently influential to challenge Hawaiian sugar operations to the utmost have been the supplies offered the American market through Porto Rico and the Philippines. For the past two decades, the combined production of these two island groups has exceeded that of Hawaii, and as in the case of Cuba, the costs of production in both cases are below those of Hawaii.¹ It thus appears that even in the American sugar market, Hawaiian cane constitutes only about ten per cent of the total, and there is every reason to believe, as the Hawaiian planters claim that were the present tariff on sugar to be removed or any marked reduction of the differential tariff on Cuban sugar to occur, this ratio would be greatly diminished.²

The pineapple industry appears to be somewhat more favorably situated with regard to the world market of this particular commodity, Hawaii producing close to ninety per cent of the world's supply;³ but unlike sugar, pineapples enter into serious competition with other types of commodities, such as canned peaches, apricots, and other canned fruits. Through an intensive program of advertising, Hawaii has greatly cultivated the world demand for the commodity, and now clearly dominates the field. Within the past thirty years of its phenomenal growth, Hawaiian pines have invaded most of the markets where two decades ago the

¹According to rough estimates of Maxwell, the comparative unskilled labor costs of the principal sugar producing areas were as follows: Java, \$.20; Philippines, \$.35; Natal, \$.40; Mauritius, \$.65; Cuba, \$1.25; and Hawaii, \$1.50. Francis Maxwell, Economic Aspects of Cane Sugar Production (London: N. Rodger, 1927).

²A considerable number of the marginal plantations in Hawaii have not paid dividends for years or very irregularly and it is probable that these enterprises would be eliminated in case tariff protection were removed.

³O. W. Freeman, The Economic Geography of Hawaii, University of Hawaii Research Publications (Honolulu, 1927), p. 49.

TABLE XXXII
SOURCES OF THE UNITED STATES SUGAR CONSUMPTION FOR RECENT YEARS¹

	1924		1926		1928	
	Tons	Per cent	Tons	Per cent	Tons	Per cent
United States cane.....	81,648	1.68	70,359	1.24	115,749	2.09
United States beets.....	744,670	15.34	872,815	15.39	1,037,241	18.71
Mainland of United States.	826,318	17.02	943,074	16.63	1,152,990	20.80
Hawaiian cane.....	505,968	10.42	618,098	10.90	683,487	12.33
Porto Rican cane.....	341,816	7.04	459,684	8.11	582,937	10.52
Philippine cane.....	265,394	5.47	312,723	5.51	476,071	8.59
Virgin Isles.....	2,169	.05	5,080	.09	9,152	.16
Islands.....	1,115,347	22.98	1,395,585	24.81	1,751,647	31.60
Free to United States.....	1,941,665	40.00	2,338,659	41.24	2,804,637	52.40
Cuban cane.....	2,824,155	58.18	3,291,297	58.03	2,807,509	47.04
United States maple, molasses	1,820	.03	1,597	.03	1,066	.03
Total preferential.....	4,767,640	98.21	5,631,553	99.30	5,513,212	99.47
Total foreign.....	86,839	1.79	39,782	.70	29,424	.53
Grand total.....	4,854,479	100.00	5,671,335	100.00	5,542,636	100.00

¹ John T. Fisher, Manual of Hawaiian Securities of 1928 (Honolulu, 1929), p. 12.

East Indies alone supplied the limited demands. The Hawaiian product is now exported in considerable quantities to Germany, the United Kingdom, Canada, France, Belgium and the Netherlands.¹ Although Hawaiian pineapples do not enjoy tariff protection in the American market, yet over ninety per cent of the local production is shipped to the mainland of the United States for consumption.²

It is a fact of some significance that the market created by Hawaiian pineapples has in turn stimulated production in other regions of the world, thus raising new competitors to the Hawaiian industry. Within the past ten years extensive pineapple developments have been projected and somewhat realized in Cuba, Central America, Philippines, Mexico, the South Sea Islands, and British Malaya.

Coffee, which is one of the minor commodities contributing to the wealth of the Islands, is clearly dependent upon the prices established in the world market. Less than one half of one per cent of the world supply of coffee comes from the Hawaiian orchards. Although, as in the case of pineapples, there is no tariff protection for the Hawaiian planters, the larger portion of the island crop is sold in the San Francisco market,³ in which the prevailing price is determined by the Brazilian output. For a number of years during the past decade, the Brazilian coffee valorization plan restricting the output in order to stabilize world prices has artificially stimulated the Hawaiian industry, but the failure of the plan two years ago created a profound depression on the Kona coffee section, as well as other minor coffee-producing areas of the world.

¹United States export values of pineapples, the great majority of which were Hawaiian, to foreign countries in 1928 were distributed as follows: Germany, \$1,625,088; United Kingdom, \$1,183,772; Canada, \$718,732; France, \$378,687; Netherlands, \$206,268; Belgium, \$150,615. United States Department of Commerce Reports on Foreign Trade, 1929.

²The valuation of pineapple shipments from Honolulu to the mainland of the United States in 1928 was \$37,459,781, while the total valuation of all exports of pineapples from the United States, including Hawaii, to foreign countries was only \$4,885,206.

³Minor shipments of both green and roasted Hawaiian coffee were made to the Philippines, China, and Ports in Europe. Cf. Honolulu Star-Bulletin, November 23, 1930.

Hawaii's experience in this regard has, of course, been similar to that of other regions throughout the world, in so far as they have been subject to western industrial influence. Regional self-sufficiency with a minimum of trade contacts in luxuries has given place to vital regional interdependence and an economic and social orientation towards the centers of trade and credit dominance. McKenzie has summarized the situation when he states:

Vital national interdependence commenced when the countries of Western Europe began to develop plantations in the tropics to supply their home markets with certain articles of consumption such as sugar, tea, and cotton. The regions thus developed produced articles for which there was no local demand. Such regions became economic dependencies and usually political colonies of the nation from which they received their capital and to which they sold their products. Until recently most of the colonial possessions of the countries of the West occupied the role of economic dependencies of the nation to which they were politically attached.¹

Thus the region rather than the individual becomes the unit of economic competition within a complex of regions similarly situated. In the web of trade relationships into which Hawaii has been drawn by the impact of the West, the Islands now occupy a somewhat mobile position of economic and social dependence upon San Francisco, Los Angeles, New York and a few other integrating metropol¹, while they hold a competitive relationship to regions such as the Philippines, Java, Cuba, Central and South America, and British Malaya.

Stabilization

The process of economic specialization described in the previous section and the expansion of industry referred to in Chapter IV² combine to create what is, in all probability, Hawaii's major problem at the present time. In brief, the logical and inevitable outcome of the concatenation of factors which we have called economic succession and racial invasion in Hawaii has been the creation of a situation which threatens the entire structure. Or to state it more abstractly, in terms of the discussion of Chapter I, the fundamental positions which its

¹McKenzie, op. cit., p. 28.

²See the complete dissertation on file in the University of Chicago Libraries.

population elements and resources have come to occupy through the years.

Plant ecologists are disposed to regard the series of stages involved in any plant succession as closing with the specific climax stage, beyond which further change in the formation does not occur save through the intervention of some factors extraneous to the closed system of relationships existing between the habitat and the life-forms. A state of equilibrium is assumed to be achieved between the climax association and the available resources of light, water, soil, mineral elements, etc., which is not likely to be disrupted by subsequent invasions.¹

Human associations have in a somewhat similar manner manifested a tendency to become stabilized for periods of greater or less permanence. We have only to remind ourselves of the classic civilizations of India, China, and Egypt to realize that human economies likewise become fixed and resistant to extraneous elements. And yet perhaps the outstanding characteristic of the economic order of the western world since the Industrial Revolution is its dynamic quality. Technological advance, with its devastating effect upon the established economic and social structure, is proceeding at an accelerating rate.² The increasing tempo of modern life is clearly indicative of the profound movements which occur on the economic level.

The most, therefore, that may be said for the stability of the plantation economy of Hawaii is that it represents a state of temporary equilibrium between the factors of production and the demands of the world market. Slight alterations in the forces acting upon the market prices of sugar or pine register an immediate influence upon the Hawaiian situation. A strike among the Cuban cane laborers, the threat of a reduction in the sugar tariff, the development of new pineapple operations in the Philippines is almost immediately felt upon the Honolulu stock market and not infrequently reverberations are heard in the Hawaiian legislative chambers and in island social policy.³

¹F. E. Clements, Plant Succession (Washington, 1916).

²Cf. William F. Ogburn, Social Change (New York, 1922), pp. 103-118.

³The threatened Congressional action (1930) restricting the movement of Filipinos to the United States, and thus seriously

Perhaps even more influential in disrupting the economic equilibrium of the Islands, and certainly more significant for our purposes, has been the shifting of the forces within the Hawaiian economic complex itself due to its own progress. We have a situation somewhat analogous to that of the plant formations which create toxic conditions resulting in the downfall of the dominant species. As we have suggested before, the successful prosecution of the plantation system in Hawaii has produced conditions which now threaten its very existence. To be specific, the outstanding problem of the Hawaiian Islands consists in the disposal of its surplus of labor and capital. Attention will first be directed to the latter aspect of the problem.

The surplus of capital.--That the capitalistic system exists for the purpose of producing profits may perhaps be accepted as axiomatic.¹ Any economic enterprise which does not give promise of at least interest upon the investment is unlikely to secure the capital necessary for its prosecution. At the same time, in a region of closed economic resources, there is always the potential problem of finding a market for the capital surplus which a successful enterprise is constantly creating. This will be readily recognized as one of the major problems of the post-war industrial order throughout the world.

The essential genius of the capitalistic order is its dynamic qualities. A surplus is created in order to be reinvested for the creation of additional surplus. In individual as well as corporate affairs the principle of the good husbandman, who invested his master's talents in order to gain ten talents more, has become the universal pattern.² Economic expansion becomes a

endangering Hawaii's labor supply and increasing its cost, occasioned a temporary reversal of the traditional Territorial policy towards statehood. The delegate to Congress was requested to desist from his efforts to secure legislative action looking towards the admittance of Hawaii as a state of the Union. Many examples of a similar sort might be cited.

¹Werner Sombart, The Quintessence of Modern Capitalism (London, 1915), pp. 308, 357: "When a money economy becomes general, gold gradually obtains its all embracing influence. . . the result is to turn greed of gold into desire for money, and to place all economic activity on a new basis--that of gain. . . . Capitalistic enterprise, aiming as it does at profits, contains within itself tendencies that favor the growth of unlimited and unprincipled undertakings."

²Cf. T. B. Veblen, The Theory of the Leisure Class (New York and London: Macmillan & Co., 1902) for one interpretation of this phenomena.

requisite to survival.

'We were always hoping,' says Andrew Carnegie in his Autobiography, 'that there would come a time when extension of business would no longer be necessary; but we invariably found that to put off expanding would mean retrogression.' Rockefeller tells the same tale.

Obviously, however, within a world of closed resources, there is a limit to the possibilities of economic expansion, and this limit varies from region to region depending upon its size, resources, industrial development, market facilities, etc.

Hawaii has for a number of years represented a fairly advanced stage of this problem. As will be recalled from earlier chapters, one of the chief limitations to the early economic development of the Islands consisted in the paucity of ready capital to finance the projected enterprises. This state of affairs continued until well after the firm establishment of the plantation economy. Large blocks of capital have been recruited, principally on the Mainland of the United States,² as recently as 1900 for the expansion of Hawaii's sugar and pineapple industries. Since that time, however, the tide of capital has swung in the opposite direction and the problem of finding a market for it has become one of some significance.

The "mining" of Hawaiian resources began almost as soon as contacts were established between the itinerant Yankee trader and the native population. It was not, however, until about a century later that capitalistic system in the Islands had developed sufficiently to permit of any export of capital seeking

¹Sombart, op. cit., p. 174.

²The extent of American domination in the movement of capital to the Islands during the period of plantation expansion is indicated fact that as early as 1886, three-fourths of the money borrowed for the prosecution of the sugar business in Hawaii came from American banks, and two-thirds of the capital invested in plantations and the facilities for the production of sugar is American. (Report of the Consul-General of Honolulu to United States Government, 1886.) By 1894, it was estimated that the American capital invested in Hawaii amounted to \$30,000,000, as against \$5,000,000 British and \$2,000,000 German and other. It should be observed, however, that many of these foreign investors were actual residents of the Islands, and that within a generation ninety per cent of the capital control of the island sugar industry was registered in the hands of residents. Cf. Fourth Report of the Commissioner of Labor on Hawaii, 1911, p. 695.

investment.¹ During the period from 1875 to 1900, a considerable part of the profits from the sugar industry were devoted to further expansions of the industry in Hawaii; but a small and then relatively inconsequential stream of surplus capital began its course into the outside world, principally to the United States.²

Not least significant in this stream of capital moving out of the country during the early plantation economy was the growing quantity of capital accumulating in the hands of plantation laborers being sent back to the countries from which they originated. It is difficult to estimate the extent of this flow previous to 1900, but it must have been quite considerable.³ Records kept by the Hawaiian Sugar Planter's Association would indicate that 3,504 of their ex-laborers returning to the Philippines previous to 1928 had saved while in Hawaii \$780,849 and that they had sent home to the Philippines for the use of their families \$1,172,019. Conflicting estimates have appeared as to the amount of surplus capital shipped to Japan by laborers in Hawaii during the last fifty years, but for over twenty years, the sum could not have been less than a million dollars per annum. The value of international money orders issued in Hawaii for Japan averaged over \$500,000 dollars per annum during the period from 1905 to 1925, but have gradually diminished since that time.⁴

¹It was not until in the 1870's that the gross export values began to exceed import values and that a sufficient capital surplus began to accumulate to allow re-investment.

²Cf. Planters' Monthly, December, 1886, p. 228.

³It was estimated by representatives of the sugar planters in 1888 that each of the 1,000 to 1,500 adult male Chinese returning to his native land during the eighties and nineties of the last century took with him from \$100 to \$500 in gold, "larger sums being generally placed in bank exchange. So with the Portuguese who are leaving for California, hardly one goes without his purse of gold. It is estimated that the two hundred and more passengers leaving on the 14th of February, took upwards of \$50,000 in gold" (Planters' Monthly, February, 1888, p. 52).

⁴The size and fluctuation of this movement is as follows:

1905	\$ 383,258.30	1917	\$1,198,038.30	1924	\$553,941.75
1908	1,157,950.42	1918	997,528.93	1925	379,818.05
1909	1,031,544.81	1919	875,497.15	1926	313,743.12
1913	1,059,204.16	1920	770,656.94	1927	345,136.91
1914	851,480.46	1921	1,011,938.83	1928	347,588.82
1915	850,058.42	1922	568,254.68	1929	322,840.32
1916	861,868.05	1923	512,840.09	1930	294,273.65

(Continued on following page)

The shipments of capital to Japan through the regular banking agencies could not have been less than the above amounts. The situation in 1915 is described as follows:

The Japanese, including those not on plantations, send more than \$1,000,000 annually to their home country through the post office, and are said to transmit a still larger sum through the Yokohama Specie Bank, which has a Branch in Honolulu. The bank officials state that a large fraction of their remittances comes from plantation hands. . . . Spanish and Portuguese who arrive in Hawaii from Europe penniless soon are able to migrate to California with money in their pockets, after paying the passages of themselves and their families to San Francisco.¹

More significant, however, for the stabilization of Hawaiian economy has been the gradual concentration of stores of island capital seeking a market for investment. During the past thirty years this problem has become increasingly acute as the profits of island industry have surpassed the opportunities for further expansion. With the cultivation of virtually all the available sugar land over a decade ago and the state of financial saturation already reached by most of the sugar enterprises, and the narrow limitations to expansion in other fields, Hawaii has for all purposes become a region of closed capitalistic resources.

It has become necessary, therefore, to seek extensive outlets elsewhere for the rising tide of surplus Hawaiian capital, and thus far the foreign fields of investment have been readily accessible. Official cognizance was taken twenty years ago of the fact that large blocks of Hawaiian capital were being used to develop the resources of foreign pioneer regions.

Hawaii is now supplying money to develop plantations in the Philippines, Formosa, the Straits, and the West Indies, and oil fields and mines in California and other Western States, and its capitalists are heavy investors in manufacturing and business enterprises, and owners of business property all along the Pacific Coast. . . . Most of the plantations (of Hawaii) are home owned. Less than 10 per cent of the sugar property in the Territory is subject in any material degree to absentee control.²

The recent drop in this movement coincides closely with the ceasing of the picture bride movement.

¹Fifth Annual Report of the Commissioner of Labor Statistics on Labor Conditions in Hawaii, 1915, p. 39.

²Fourth Report of the Commissioner of Labor on Hawaii, 1911, p. 695.

Particularly since 1910 have extensive agricultural enterprises in the tropics been organized in Hawaii with local capital. The Honolulu Stock Exchange lists the stock of \$2,000,000 sugar plantation incorporated in Hawaii with its operations in the Philippines. It likewise lists four Hawaiian corporations with foreign operations, with an aggregate capitalization of over \$3,000,000 largely subscribed in Hawaii--a rubber plantation in Sumatra, and three rubber and copra plantations in the Malay States.¹ Two additional Philippine sugar plantations have been largely financed by Hawaiian capital, and Hawaiian investors have considerable stocks in four others.²

An interesting complication arising out of the flow of Hawaiian capital to the sugar fields of the Philippines, and another evidence of the baffling relationships between competing regions, revolves about the changing rôle of Philippine sugar in the American market. The Philippines now supply between five and ten per cent of the sugar supply of the United States, and because of the freedom from duty and the large field for plantation expansion, Philippine sugar now constitutes a serious threat to American, as well as Hawaiian, competitors. American beet growers were principally responsible for the introduction to Congress of a bill to restrict duty-free sugar from the Philippines; but although Hawaiian planters had combined with Louisiana cane and beet growers in seeking a higher base schedule against Cuba, the circumstances already described prevented a united front against the Philippines.³ The H. S. P. A. definitely opposed legislation that would place a tariff against all Philippine importations in excess of 500,000 pounds. Thus Congress was faced with the rather anomalous situation of American producers clamoring for protection against Cuba and the Philippines, while at the same time some of these same interests insisted that their investments in those countries be protected. This same situation is clearly responsible for the divided attitude of American interests toward Philippine independence.⁴

¹Fisher, op. cit.

²Honolulu Star-Bulletin, April 20, 1929.

³Ibid., January 17, 1929.

⁴The H.S.P.A. have unequivocally expressed themselves as opposed to Philippine Independence.

The most recent attempt to secure a foreign market for the excess of local capital and thus effect a stabilization of Hawaiian economy is to be observed in the investigations of the possibilities of pineapple cultivation in the Philippines, Fiji, Haiti, and elsewhere. The earliest investigations were made of the Philippines by a large American packing concern with considerable pineapple holdings in Hawaii.¹ Should this experiment prove successful, it would mean serious competition to Hawaiian pineapples in the American market as a result of the expansion of the Hawaiian industry. More recently experiments have been made looking towards the expansion of local Hawaiian capital to British South Sea Islands in order to more effectively tap the British pineapple market, now protected by a tariff.

Perhaps the most striking evidence of the surplus of Hawaiian capital seeking investment is found in the feverish buying of Wall Street stocks during the big bull market of two years past. In the five months from July 1st to November 30th, 1929, stocks to the market value of over nine million dollars were purchased through the Honolulu stock exchange.² The total purchase investment in eight leading issues alone during this period reached \$2,687,496. The records do not reveal how many of these stocks were bought outright and how many on margins, but the mere size of this movement is highly significant of the state of affairs in the Islands. During the same time a considerable quantity of Chinese capital from Hawaii was being invested in Chinese silver. Conservative estimates place the amount of Hawaiian capital invested in China during this period at not less than \$1,000,000 gold.³

This situation indicates the basis of what is likely to become a serious problem to the island economy of the future. With the disappearance of the world's economic frontiers and the closing of additional regions to capitalistic expansion, Hawaii along

¹Cf. Honolulu Star-Bulletin, July 24 and September 3, 1929.

²Stock sales during the same period through the Honolulu stock exchange amounted to about seven million dollars, leaving Hawaiian investors with two million dollars worth of additional securities on their hands when the crash occurred. Cf. Honolulu Advertiser, December, 1929.

³Ibid., January 8, 1930.

with other regions of closed economic resources will find it increasingly difficult to dispose of its capital surplus. Conspicuous consumption, in the form of luxurious yachts, palatial country homes, and costly sports, have and will undoubtedly help to reduce this surplus; but if the present economy is to survive, a more profitable market for its capital must be found. On the other hand, each additional investment in foreign tropical agriculture raises up new and stronger competitors for the markets through which Hawaii enjoys its present prosperity.

The surplus of labor and the attempts at stabilization.--

No less important than the problem just discussed, and even more complicated, are the difficulties arising out of the surplus labor supply created by Hawaii's economic succession. This problem has, however, been analyzed in the previous chapter and at this point we need only call attention to some of the more important social implications.

The process by which Hawaii imports large numbers of unskilled laborers from various sections of the globe, exploits their labor power for a few years on the sugar and pineapple plantations, and at the same time initiates them into the great American scramble for a place at the top of the economic ladder, is apparently irreversible¹ and is cumulative in its exactions upon the existing economy and culture. Each new generation of plantation workers occasions an addition to the surplus of competitors for the preferred positions within the system, not alone by the graduation of the majority of its number to the ranks of non-plantation pursuits, but even more by the creation of a second generation even more thoroughly inoculated with the American success virus.

As in the case of the capital surplus, the logical economic solution of the disequilibrium is obviously that of emigration; but the difficulties in the way are even more acute. Obstacles, not only of an economic but psychological and cultural character, prevent any extensive movement of Hawaii's growing surplus population to other acceptable regions. Due to the higher standards of living which the plantation economy has provided and the greater economic and cultural expectations which American

¹Cf. R. E. Park, "Our Racial Frontiers on the Pacific," Survey Graphic, May, 1926, p. 196; also R. D. McKenzie, "The Oriental Finds a Job," ibid., p. 161.

life has generated in both the immigrant and his children, there is obviously no place for them as economic competitors in the regions from which the labor was originally recruited.¹ These are already regions of closed labor opportunity. With the absorption of the Oriental countries within the world web of trade, a limited number of opportunities for technically trained Hawaiian-born are appearing; and several hundred or more engaged in skilled or professional pursuits in China, Japan, and the Philippines,² but this field of opportunity is likely to diminish rapidly as these regions produce their own supply of experts. Furthermore, due to the economic differential between the Hawaiian and the other regions to which they emigrate, many of those who attempt to establish themselves in the Orient give up the attempt and return to the Islands.

Still another field for expansion lies in the western world, particularly the mainland of the United States and some of the remaining pioneer regions in North and South America. For many years it has been charged that Hawaii serves only as a stepping stone for Oriental laborers to the United States, and the immigration records of Hawaii would indicate a certain measure of truth in this statement. The excess of steerage emigration to the mainland of the United States during the past twenty³ years

¹Even the first generation immigrants find it somewhat difficult to reaccommodate themselves to the conditions in the old country community, largely because they themselves have changed since leaving it. Many immigrants who have returned to their old country homes, expecting to spend their declining years there, find the situation intolerable and go back to Hawaii. Cf. R. Adams, The Education of the Boys of Hawaii and their Economic Outlook, University of Hawaii Research Publications (Honolulu, 1927), p. 51.

²These individuals are engaged primarily as schoolteachers, engineers, foreign trade managers, clerks, and political administrators. Accurate statistics of the extent of this return movement are very difficult to secure. During the five year period from 1926 to 1930, it appears that there was an excess of departures over arrivals from the Orient of Chinese United States citizens of 232 and of Japanese United States citizens of 2,093. (Report of Commissioner General of Immigration, 1930.) It is probable that the excess of Chinese emigration would be slightly larger and that of the Japanese somewhat less if correction could be made for the movement of children sent back to the old country to be educated.

³During the five years from 1906 to 1910 the steerage movement from Hawaii to Continental United States was as follows:

is roughly indicated in the following table:

TABLE XXXIII

APPROXIMATE EXCESS OF STEERAGE EMIGRATION TO THE UNITED STATES OVER IMMIGRATION FROM UNITED STATES FOR PRINCIPAL GROUPS^a

	1912-1920	1921-1929
Chinese.....	238	-75
Japanese.....	418	433
Filipino.....	2,207	14,127
Korean.....	85	28
Iberian.....	8,799	2,369
Porto Rican.....	355	788

^aTaken from Governor's Reports.

It is clearly evident from the above table that during the last eighteen years it has been the South Europeans and the Filipinos rather than the Orientals of Hawaii who have utilized Hawaii as a stepping stone to the United States. In proportion to their population, the net emigration of Orientals from Hawaii to the mainland has been very slight and diminishing in extent. Even in the case of the second generation, who are American citizens and nominally at least enjoy the right of free movement in Continental United States, the movement has been relatively slight. During the last nine years (1922-1930) the excess of arrivals over departures from continental United States of United States citizens of Chinese ancestry was only 160, while that of Japanese ancestry was 1,253.¹ In both instances, a considerable proportion of the excess is accounted for by the students enrolled in mainland schools, who will probably return to Hawaii to follow their profession. Within recent years Mexico, Central America, and various South American countries have frequently been mentioned as possible fields of opportunity for the second gener-

Chinese, 50; Filipinos, 85; Hindus, 484; Iberian, 4,601; Japanese, 17,804; Korean, 616; and Russian, 683. Most of the Japanese made their exodus previous to 1907, when the Roosevelt proclamation went into effect. Fifth Annual Report of Commissioner of Labor Statistics on Labor Conditions in the Territory of Hawaii, 1915, p. 64.

¹Report of Commissioner-General of Immigration, 1930, p. 257.

ation of Oriental ancestry, but to date few if any from Hawaii have availed themselves of this alleged opening.

The reasons for the paucity of Oriental emigrants to the mainland are not hard to find;¹ the same economic dis-equilibrium which prompts their emigration from Hawaii complicated by psychological problems far more involved than those which exist in the Islands, serves to diminish the value of this field for Hawaii's excess population. All those subtle barriers and antagonisms which arise whenever members of a different race seek to escape from their accepted position have served to discourage all but the most hardy from a persistent attempt. As Dr. Adams has suggested, however, these few second generation pioneers on the American wilderness

are testing out many ways of making a living. Some will discover ways of working that can be copied--patterns will be worked out. Then the problem solvers--pattern makers--will become centers; their friends will join them and follow the same pattern or be aided while finding new ways.²

The limited experience in the Chicago colony of Hawaiian born Chinese and Japanese would tend to confirm this general hypothesis, but as yet, the successes have been so few that no extensive emigration from Hawaii has resulted. Four successful Hawaiian-born Japanese in Chicago--a dentist, a structural engineer, a photographer, and a radio engineer--have doubtless been partially responsible for the fact that others have come to the city to study in the same fields; but as yet none of these followers have become satisfactorily established.

Reducing the pressure within.--Another logical solution for Hawaii's problem of a surplus population is obviously that of restricting the number of people who come into the region, either by birth or by immigration. As we have seen before, the attempts to reduce, if not prohibit, the importation of additional laborers into the territory are as old as the plantation system itself, and if the economy based upon this system is to continue, so likewise must some type of labor importations. Thus far every blocking of labor immigration from one quarter has sooner or later

¹Cf. E. Mears, Resident Orientals on the American Pacific Coast (Chicago, 1928), and the East by West issue of the Survey Graphic, May, 1926, for discussions of some of the factors involved.

²Romanzo Adams, Unpublished manuscript.

led to a new importation from some other region of lower economic standards; if Filipino exclusion occurs, recruits for Hawaii's plantations will be found in Porto Rico.¹ A change in the underlying system, whereby Hawaii's second generation might be absorbed as the primary labor supply is not likely to occur as long as no legal obstructions are placed in the way of the present easy importations.

The curbing of Hawaii's growing human surplus will in all likelihood depend increasingly upon voluntary limitation of the birth rate. Until within the past generation, the artificial restriction of the birth rate has been no more of a problem in Hawaii than in other pioneer regions of the world. The expanding economic opportunity incidental to the establishment of an industrialized culture along with an industrialized economy, the peasant tradition of the population, and the lack of contraceptive devices, have until recently maintained the corrected birth rate in Hawaii at a high level.² Under the conditions described, however, this rate of increase is bound to diminish with increasing rapidity. There is ample evidence that the second generation are not disposed to assume the responsibilities of parenthood with anything like the frequency of their parents; and although it is difficult to subject the movement to precise measurement, there is reason to believe that the corrected birth rate is declining most rapidly among the younger age groups. This problem will be susceptible of more accurate statistical analysis as time goes on; for the present the above hypothetical formulation must suffice.

¹The recent threat of Filipino exclusion caused the H.S. P.A. to reopen negotiations with Porto Rico as the one available source of plantation laborers under United States control.

²The following corrected birth rates (based upon the number of births per thousand of married women, aged 15 to 44 years) obtained in Hawaii in 1920:

Hawaiian and Part		Chinese	329.7
Hawaiian	296.0	Japanese	258.4
Portuguese	287.2	Korean	332.2
Porto Rican	334.6	Filipino	270.9
Spanish	342.3		
Other Caucasian	150.4	Total	269.3

These rates may be compared with comparable rates from the mainland United States.

Total	167.2	Native	164.3
Foreign born	177.4	Negro	148.6

The restriction of population growth through a declining birth rate, however, requires considerable time to become practically effective, and in the meantime serious social problems are accumulating. In spite of all the devices suggested in the foregoing pages, a population surplus is rapidly accumulating in Hawaii, and with it have developed social problems of a sort to jeopardize the system itself.

Under the stimulus of Western competition for economic status--Veblen's "pecuniary emulation"--and the racial and cultural character of island population, there has been precipitated in Hawaii an expectation of monetary success among the masses which the realities of the situation do not justify. It is beginning to be generally recognized that in Hawaii, as in numerous other regions of the world, there is little possibility of satisfying the claims which its population is making upon the existing economic and social order. The much deplored striving for "white collar jobs" in Hawaii is, of course, the perfectly natural response to the island situation, and yet preferred positions adequate to meet the demand do not and will not exist. In a region whose resources are almost exclusively agricultural, there is scant likelihood that the number of people engaged in white collar jobs will greatly exceed the existing numbers. The sugar industry, for instance, which provides approximately thirty per cent of the employment of the Territory, classifies 84 per cent of its employees as unskilled, requiring practically no experience and only a grammar school education, or less.¹ The proportion of unskilled workers among the 20,000 employees of the pineapple industry in 1930 was slightly higher. That the supply of the more desirable professional and skilled positions is becoming rapidly exhausted in Hawaii becomes more acutely evident every day.²

¹Only 2 per cent of the 52,136 employees in 1930 had as much as a high school education, the remaining 98 per cent having only a grammar school education or less. Sixty-nine per cent were classified as having little or no schooling. Governor's Advisory Committee on Education, 1931, p. 16.

²As an example of the competition in the urban and professional employments, one might cite the experience of the large numbers of island youth who within recent years have been training for the teaching profession. Of a hundred graduates in 1931 from the School of Education of the University of Hawaii, less than twelve can be placed in positions in the Territorial school

The inevitable consequence of such a play of social forces is, of course, a state of social maladjustment which is now causing educators and social workers in the Islands considerable concern. The problem of what is to become of Hawaii's human ratoon crop is not alone one which is disturbing the mental equilibrium of island statesmen and social leaders, but it is causing untold anxiety to those who are immediately involved. The awakening realization that the much vaunted "freedom of opportunity and room at the top" is subject to extensive qualifications due to the character of island economy, the existence of vested rights and interests, and the subtle influence of race and class prejudice, explains to a large degree the cynical attitudes towards American institutions and values to be observed among a considerable number of the more mature members of the second generation of Oriental ancestry. A fairly well defined mutation of attitude from one of unquestioning endorsement of the existing order to one of complete rejection of their former loyalties,¹ is often to be observed in the course of transition from school life to the grim reality of the economic struggle.

The inability of individuals to realize in some degree their fondest ambitions and the expectations which relatives and friends place upon them leads quite naturally to personal disorganization. Exasperation with a social system which raises hopes in the individual only to dash them to the ground, gives place to an even more serious state of mind, namely, loss of self-

system. An equally difficult situation faces the large graduating classes of the Territorial Normal School. The medical and dental professions promise soon to be similarly situated. At the present time Hawaii's per capita of physicians is considerably below that of the United States as a whole (Cf. Lewis Mayers and L. V. Harrison, The Distribution of Physicians in the United States (New York: General Education Board, 1924) but were the forty or more island-born medical students enrolled in mainland colleges and the fifty additional pre-medical students at the University of Hawaii to return to actually engage in the practice in Hawaii, the field would be greatly overcrowded. Fortunately many will fall by the wayside. Dentistry, engineering, and commerce reveal a similar situation.

¹Unpublished studies made by the Sociology Department of the University of Hawaii reveal fairly distinct cyclical fluctuations in the attitude towards the conventional American values and those of their parental cultures on the part of the second generation Orientals.

respect.¹

Prospects

One need scarcely assume the rôle of social prophet to observe that the process of economic and cultural succession initiated a century and a half ago when Captain Cook first located the Sandwich Islands on the rudimentary charts of the Pacific is now clearly in its climax stage. It is likewise patent that further elaboration of the dominant economy is rigorously limited by the factors already stated, and that, on the other hand, a complex of forces has emerged which now threaten the very system itself. As in the case of successions on the plant level, so likewise in the economic succession here described, the dominant association is eventually undermined by the very forces which contribute to its maintenance, and a new cycle of development is initiated.

What the sequel to the existing order is likely to be, is difficult to determine on the basis of our present study; but a careful analysis of the modifications of the plantation economy already effected should indicate the direction and the rate of the change. This problem holds even greater interest and promise for the social scientist, since its solution will tell us much of the prospects for the whole of western civilization. For certain it is that the Hawaiian Islands still float on the tropic seas and the position they occupy at any given time reflects not alone the state of the island fleet but the macrocosm of which they are a part.

¹Graduate students of Oriental ancestry from Hawaii report that there are a half dozen or more of their fellows in Chicago who have completed professional courses on the Mainland, and discouraged by the hopeless struggle to achieve a position for themselves in the Islands, have drifted into immoral pursuits in the large city. It is claimed that a similar situation obtains in the cities of the Pacific coast.

